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Serial No. 09/432,069

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF APPEALS AND INTERFERENCES**

Appellants: Harry SANTAMAKI et al.

Application No.: 09/432,069

Filing Date: November 2, 1999

Title: **SYSTEM AND METHOD FOR ENHANCED DATA ACCESS
EFFICIENCY USING AN ELECTRONIC BOOK OVER DATA
NETWORKS**

Art Unit: 2154

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APPEAL BRIEF

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

May 19, 2004

Sir:

Pursuant to Appellants' earlier filed Notice of Appeal dated on February 20, 2004, Appellants hereby appeal to the Board of Appeals and Interferences from the final Office Action (Paper No. 7) dated on October 21, 2003 with respect to all the finally rejected claims 1-7, 9-18- 20-26 and 28.

This Appeal Brief is being filed in triplicate.

I. Statement of Real Party in Interest

Pursuant to 37 C.F.R. §1.92(c)(1)(as amended), the real party in interest is:

Nokia Corporation
Keilalahdentie 4, FIN-02150
ESPOO, FINLAND

II. Related Appeals and Interferences

Pursuant to 37 C.F.R. §1.192(c)(2)(as amended), although the real party in interest has other pending appeals and interferences, none of the other pending appeals and interferences is believed to directly affect or be directly affected by, or to have any bearing upon the decision of the Board of Patent Appeals and Interferences in this appeal.

III. Status of the Claims

Claims 1-28 are pending in this application at the filing of this Brief. In the final Office Action (Paper No. 7) dated on October 21, 2003, claims 1-28 have been finally rejected under 35 U.S.C. §103(a) as allegedly being obvious over Sweet et al., U.S. Patent No. 6,415,278, as modified to incorporate selected features from Warnock, U.S. Patent No. 5,634,064. However, dependent claims 8, 19 and 27 have, since the Advisory Action (Paper No. 10) dated on February 3, 2004, been

0171.37310X00
Serial No. 09/432,069

conditionally allowed if rewritten in independent form to include all limitations of base claims 1, 13 and 21. As a result, Appellants are appealing from all outstanding rejections of claims 1-7, 9-18, 20-26 and 28. Of the appealed claims, claims 1, 13 and 21 are independent claims.

IV. Status of the Amendments

An Amendment After Final under 37 C.F.R. §1.116(b) was filed on January 20, 2004, and will be entered upon filing of this Appeal Brief.

V. Summary of the Invention

In conventional electronic book systems, electronic documents are stored in a remote on-line bookstore (e.g., remote server which contains an inventory of written materials in electronic form). An e-book terminal (also known as "e-book") having built-in communications means is then used to automatically dial and access the remote on-line bookstore (remote server) over a telephone line. When a communication link is established between the e-book terminal and the on-line bookstore, the user may display, select (browse) and request for downloading selections to the e-book terminal for subsequent viewing and/or printing purposes. However, access rights per individual users are limited. Individual users must log on the on-line bookstore, via the e-book terminal, search from different categories of

electronic written materials and request for download to the e-book terminal. The selected materials must also be converted into an e-book terminal format before downloading to the e-book terminal for subsequent viewing over a telephone line. Special conversion software must be installed at the on-line bookstore (web server) and the electronic book to convert the selected materials into an electronic book format for the individual user to download to the electronic book for reading purposes. Otherwise, printing of the selected materials, and particularly the copyrighted materials may be prohibited. As a result, distribution of the electronic reading materials can be limited.

The present invention is directed to various embodiments of an improved electronic book system, as shown in FIG. 1, FIG. 7 and FIG. 8, for advancing distribution of electronic reading materials using an electronic book (e-book) server at different locations over different data networks in order to improve data access efficiency at the e-book server using an e-book or similar viewing device.

Specifically, FIG. 1 illustrates an improved electronic book system for advancing distribution of electronic reading materials using an electronic book (e-book) server at a designated location of a private network according to an embodiment of the present invention. Such an electronic book system, as shown in FIG. 1, and currently defined in Appellants' **independent claim 1**, comprises a private network 20 (such as a corporate LAN); a central server 12 connected to the

private network 20, which stores a collection of electronic documents; an e-book server 30 which stores an electronic document selected from the central server 12 converted in an e-book format for later downloading to a remote e-book terminal 50, via a public network 40 (such as a plain old telephone service (POTS), a public switched telephone network (PSTN), an integrated services digital network (ISDN), a mobile network, a satellite network, and/or an Internet); and a user host computer 10 connected to the private network 20, which enables the user to select the electronic document from the central server 12, and utilize a print function of an operating system (OS) to transfer the selected electronic document from the central server 12 for storage in an e-book format at the e-book server 30, as shown in FIG. 3, for later downloading to a remote e-book terminal 50, via the public network 40.¹

The selected electronic document, as currently defined in Appellants' **dependent claims 11-12**, can also be printed from the host computer 10 under instructions from a user for delivery to the e-book server 30 over the private network 20 for later downloading to the remote e-book terminal 50, via the public network 40 (or Internet), as shown in FIG. 1.²

FIG. 8 illustrates an improved electronic book system for advancing distribution of electronic reading materials using an electronic book (e-book) server at a designated location of a private network according to another embodiment of

¹ See pages 9-12 of Appellants' original specification.

the present invention. Such an electronic book (e-book) system, as shown in FIG. 8 and as currently defined in Appellants' **independent claim 13**, comprises a private network 20 (such as corporate LAN); a central server 12 connected to the private network 20, which stores a collection of electronic documents; a docking station 90 connected to the private network 20, which supports an e-book terminal 50 to receive an electronic document selected from the central server 12 converted in an e-book format for later viewing off-line; and a user host computer 10 connected to the private network 20, which enables the user to select the electronic document from the central server 20, and utilize a print function of an operating system (OS) to transfer the selected electronic document from the central server 12 in an e-book format to the docking station 90 for direct downloading into the e-book terminal 50 for later viewing off-line.³ This way the docking station 90 may allow the e-book terminal 50 to receive the electronic document directly and conveniently. In this embodiment, the user may "print" one or more electronic documents from the host computer PC 10 or from the corporate server 12 directly to an e-book terminal 50 that is connected to the private network 20 instead of an e-book server 30. As a result, the user can take the e-book terminal 50 from the docking station 90 and "read" the electronic document off-line.⁴

2 See pages 9-12 of Appellants' original specification.

3 See pages 27-28 of Appellants' original specification.

4 See page 28, lines 4-11 of Appellants' original specification.

Alternatively, FIG. 7 illustrates an improved electronic book system for advancing distribution of electronic reading materials using an electronic book (e-book) server at a designated location of a private network for downloading to a remote e-book terminal via an Internet according to yet another embodiment of the present invention. Such an electronic book (e-book) system, as shown in FIG. 7 and as currently defined in Appellants' **Independent claim 21**, comprises a first (private) network 20 (such as corporate LAN); a second (public) network 80 (such as the Internet) different from the first network 20; a remote e-book terminal 50; a user host computer 10; a central server 12 connected to the first (private) network 20, which stores a collection of electronic documents; and an e-book server 30 which stores an electronic document selected from the central server 12 converted in an e-book format for later downloading to the remote e-book terminal 50, via the second (public) network 80, wherein such host computer connected to first network 20, includes an e-book driver software installed therein to provide an interface with an operating system (OS) and to direct a selected electronic document from the central server 12 to the e-book server 30, via the second (public) network 80 (such as the Internet), and an emulation software installed therein to emulate the e-book server 12 as a token network printer in the first network 20, when a print function of the operating system (OS) is activated, as shown in FIG. 3, to transfer the selected electronic document from the central server 12 for storage in an e-book format at the

e-book server 80, via the second (public) network 80 for later downloading to the remote e-book terminal 50, via the second (public) network 80.⁵

The host computer 10, defined in Appellants' **dependent claims 2, 3, 14, 15, and 23** includes an e-book driver software installed therein to provide an interface with the operating system (OS) and, using an "Add Printer Wizard" to set to direct the selected electronic document to the e-book server 30, and an emulation software installed therein to emulate the e-book server 30 as a token network printer in the private network 20, as shown in FIG. 2 and FIG. 3.

The emulation software, as generally defined in Appellants' **dependent claims 4, 6, 7, 16, 18, 24, 26**, includes a conversion subroutine for converting data reflecting the selected electronic document into an e-book format for storage at the e-book server.⁶ Both the e-book driver software and the emulation software may be embodied on any of a variety of computer readable media for use with the host computer 10, as currently defined in Appellants' **dependent claims 5, 17 and 25.**⁷

Both the e-book driver software and the emulation software installed at the host computer 10, as currently defined in Appellants' **dependent claims 8, 19 and 27**, may interact with the operating system (OS) to transfer the selected electronic document to the e-book server 30, via the private network 20, according to the

5 See page 27, lines 7-18 of Appellants' original specification.

6 See page 12, lines 3-13 of Appellants' original specification.

7 See pages 9-12 of Appellants' original specification.

following steps, as shown in FIG. 4.⁸

The remote e-book terminal 50, as shown in FIGs. 5A-5B and FIG. 6, and as currently defined in Appellants' **dependent claims 10 and 28**, for use to download or request automatic delivery of a selected electronic document stored in an e-book format from the e-book server, comprises an electronic module which provides a central processing unit (CPU) 510 to control all operations of the e-book terminal under instructions of the operating system (OS); a BIOS read-only-memory and a random-access-memory which provide the primary memory space to write, store and retrieve information and program instructions used by the CPU 510; a display and a display controller 514 which support a visual display of the selected electronic document on a display screen 512; a power unit 516 which provides power supply to the e-book terminal; an updatable read-only-memory 518 which supports additional memory capacity; a communication interface 520 which supports communications with the e-book server via the public network; and a security unit 522 which provides overall security to the e-book terminal 50.

Preferred embodiments of the electronic book system which comprises the desktop PC 10, the corporate server 12 with database 14, the e-book server 20 and the e-book terminal 50 as described with reference to FIGs. 1-8, may also incorporate one or more internetwork security tools, such as encryption shown in

8 Note: Appellants' dependent claims 8, 19 and 27 have been conditionally allowed as per

FIG. 10, to protect the content of information during transmission across a network, to assure the authenticity of network interactions, and to thwart attempts to subvert system by means of network access capabilities. This way only an intended e-book terminal 50 has the right to access and read the electronic document stored in the designated e-book server 30, via the public network 40.

VI. Issues

1. Whether claims 1-7, 9-18, 20-26 and 28 are unpatentable under 35 U.S.C. §103(a) as rendered obvious over Sweet et al., U.S. Patent No. 6,415,278, as modified to incorporate selected features from Warnock, U.S. Patent No. 5,634,064.

VII. Grouping of Claims

Independent claims 1, 13 and 21 are argued separately, with the arguments necessarily carrying forward to their respective dependent claims 2-7, 9-12, 14-18, 20, 22-26 and 28. In addition, each of dependent claims 2-7, 9-12, 14-18, 20, 22-26 and 28 is also argued separately. Therefore, for purposes of the rejections under 35 U.S.C. §103(a), claims 1-7, 9-18, 20-26 and 28 stand or fall independently of each other under 37 C.F.R. §1.192(c)(5) for the reasons set forth in the arguments presented herein below.

VIII. Brief Description of Cited References

As cited prior art references, both Sweet et al., U.S. Patent No. 6,415,278 (hereinafter “Sweet ‘278”), and Warnock et al., U.S. Patent No. 5,634,064 (hereinafter “Warnock ‘064”) are assigned to Adobe System Incorporated, and are directed to various methods utilized at a user host computer for viewing (including creating) or retrieving (including printing) electronic documents in a predetermined format (such as, portable document format “PDF”) from a web server or a remote memory over a network.

For example, Sweet et al., U.S. Patent No. 6,415,278 (hereinafter “Sweet ‘278”), as a primary reference, discloses a technique of capturing hypertext (known as “HTML”) web pages for convenient viewing, via an Internet. Since most visual display data on the Web are stored as sets of linked HTML documents, Sweet ‘278 proposes that such visual display data be converted (integrated) and stored as a single document, having a fixed page size, using a physical markup language such as the portable document format (PDF) as described by Adobe System. This is done by calculating minimum dimensions required to display all screen objects within the document at their normal size, creating a physical markup representation and scaling the same based on the calculations. As a result, web page(s) can be converted to a single paginated document having fixed page dimensions, without

losing information because of space constraints

Specifically, as shown in FIG. 11, Sweet '278 describes the manner in which a client software, in the form of a plug-in module or an OS extension, is installed at a user host computer 100, in order to enable the user to utilize a browser 110 to retrieve web pages written in a semantic markup language, such as HTML, from a web server 140, via a communication link 102, and then convert or integrate the retrieved HTML web page(s) into a single paginated document described in a physical markup language, such as PDF, using a web page integrator 135, for a visual display on a monitor 140, via a PDF viewer 120.

The PDF document, which is displayed by the PDF viewer 120, may have hypertext links to web pages, as well as to internal pages within the PDF document. Therefore, if the user selects a hypertext link in the PDF document, the web page is to be displayed by the PDF viewer 120. However, if the hypertext link is to a web page, that web page is either displayed by the browser 110, or integrated into the PDF document and displayed by the PDF viewer 120, depending on a mode selected by the user.

Warnock et al., U.S. Patent No. 5,634,064 (hereinafter "Warnock '064"), as a secondary reference, also discloses an electronic document program (software) including a document generator (module) to enable a user to create a source document including one or more articles, and information concerning section links

between consecutive sections within a particular article, and a document reader (module) to enable the user to navigate through the articles, including automatically panning and zooming into a reading area of a display window to enhance the readability of those portions of the article. Such an electronic document program is installed at a user host computer, as shown in FIG. 1, including, for example, a CPU 12, memory 14, a display monitor 16, and input devices such as a keyboard 34 or a mouse 36.

According to Warnock '064, the source document created is converted into a PDF document, as shown in step 58, FIG. 3, edited (if necessary, see steps 60, 62, 64) and then stored in local memory 14, or alternatively, in remote memory over a network 28, as shown in step 66, FIG. 1. Such PDF document as stored can subsequently be printed, as shown in FIG. 3B, or alternatively, be displayed in a variety of article viewing modes, including a normal view mode and an article view mode. In an article view mode, portions of the article or the entire article can be read regardless of the physical arrangement of any article section within the PDF document. Selected portions of the PDF document may be panned and zoomed to fit a viewing area or window to enhance the readability of the article.

IX. Arguments

1. Claims 1-7, 9-18, 20-26 and 28 are deemed patentable under 35 U.S.C. §103(a) as rendered novel over Sweet et al., U.S. Patent No. 6,415,278, as modified to incorporate selected features from Warnock et al., U.S. Patent No. 5,634,064.

Claims 1-7, 9-18, 20-26 and 28 stand finally rejected as being unpatentable under 35 U.S.C. §103(a) as rendered obvious over Sweet et al., U.S. Patent No. 6,415,278, as modified to incorporate selected features from Warnock, U.S. Patent No. 5,634,064. In the final Office action (Paper No. 17) dated on June 4, 2002, the Examiner has, in support of the rejection of Appellants' base claims 1 and 13, asserted that Sweet '278, as a primary reference, discloses all features of Appellants' invention substantially as claimed, including an electronic book (e-book) system [col. 3, line 60- col. 4, line 5] comprising:

a private network [i.e., connection between 140 and 144 on Fig. 11];

a central server [144, Fig. 11] connected to said private network, which stores a collection of electronic documents [144, Fig. 11; col. 8, lines 9-10];

an e-book server [100, Fig. 11] which stores an electronic document selected from said central server converted in an e-book format [i.e., PDF format] [col. 7, lines 8-14; col. 8, lines 27-35] for downloading to a remote e-book terminal [col. 8, lines 10-15]; and

a host computer [140, Fig. 11] connected to said private network, which selects the electronic document from said central server [col. 8, lines 9-11], and transfer the selected electronic document from said central server for storage in an e-book format at said e-book server for later downloading to said remote e-book terminal [col. 8, lines 24-44].

In support of the rejection of Appellants' base claim 21, the Examiner also asserts that Sweet '278, as a primary reference, discloses all features of Appellants' invention substantially as claimed, including an electronic book (e-book) system [col. 3, line 60- col. 4, line 5], comprising:

a first network [i.e., connection between 140 and 144 on Fig. 11];
a e-book terminal [100, Fig. 11];
a host terminal [140, Fig. 11];
a central server [144, Fig. 11] connected to said private network, which stores a collection of electronic documents [144, Fig. 11; col. 8, lines 9-10]; and
an e-book server [100, Fig. 11] which stores an electronic document selected from said central server converted in an e-book format [i.e., PDF format] [col. 7, lines 8-14; col. 8, lines 27-35] for later downloading to a remote e-book terminal [col. 8, lines 10-15];
wherein said host computer connected to first network [col. 8, lines 9-11] for transferring the selected electronic document from said central server for storage in an e-book format at said e-book server for later downloading to said remote e-book terminal [col. 8, lines 24-44].

The Examiner then admits that Sweet '278 does not specifically teach the step of using "a print function of an operating system to transfer the selected electronic file for storage as an e-book format from the central server to the e-book server". However, the Examiner cites column 5, lines 51-62 of Warnock, U.S. Patent No. 5,634,064, as a secondary reference, for allegedly disclosing the step of using "a print function of an operating system to transfer the selected electronic file for storage as an e-book format from the central server to the e-book server" in order to

enable one skilled in the art to arrive at Appellants' base claims 1, 13 and 21, i.e., to incorporate

"Warnock's file transmitting step in Sweet's system because it is well-known PDF file transmitting or processing method in the art [Warnock, col. 5, lines 59-62]. See page 3 of Paper No. 7.

However, the Examiner's comments and assertions are both factually incorrect and legally improper because neither Sweet '278 nor Warnock '064 discloses all features of Appellants' base claims 1, 13 and 21, or discloses what the Examiner alleges. Even more puzzling is the fact that **no** where in either Sweet '278 or Warnock '064 is there disclosure of Appellants' claimed "electronic book system for advancing distribution of electronic reading material using an electronic book (e-book) server at different locations over different data networks (i.e., private network and public network) in order to improve data access efficiency at the e-book server using an e-book or similar viewing device" as generally defined in each of Appellants' base claims 1, 13 and 21. Therefore, the §103 rejection of Appellants' base claims 1, 13 and 21 should be reversed for reasons as discussed *in seriatim* herein below.

A. The Examiner failed to establish a *prima facie* case of obviousness of Appellants' independent claims 1, 13 and 21 because there is no factual evidence to support such a conclusion of obviousness.

In rejecting claims under 35 U.S.C. §103, the Examiner bears the initial burden of establishing a *prima facie* of obviousness. In re Rijckaert, 9 F.3d 1531, 1532, 26 USPQ2d 1955, 1956 (Fed. Cir. 1993); In re Oetker, 977 F.2d 1443, 1445 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). Only if this burden is met does the burden of coming forward with rebuttal argument or evidence shift to the Appellants. Rijckaert, 9 F.3d at 1532, 26 USPQ2d at 1956. When the reference(s) cited by the Examiner fail to establish a *prima facie* case of obviousness, the rejection is improper and must be overturned. In re Fine, 873 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Obviousness under 35 U.S.C. §103 is a legal conclusion based on factual evidence, not a factual determination. Graham v. Deere, 383 U.S. 1, 148 USPQ 459. It is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. In re Fine, 873 F.2d at 1074, 5 USPQ2d at 1598. Determination of obviousness must be based on facts, and not on unsupported generalities. In re Warner, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967); In re Freed, 425 F.2d 785, 165 USPQ 570 (CCPA 1970). Any deficiencies in the factual basis cannot be supplied by resorting to speculation or

unsupported generalities. Id.

To establish a *prima facie* case of obviousness under 35 U.S.C. §103, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skilled in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Appellants' disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). In other words, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USQP 494, 496 (CCPA 1970).

Moreover, "obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination." ACS Hospital System, Inc v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). The Examiner must point to something in the prior art that suggests in some way a modification of a particular reference or a combination of references in order to

arrive at Appellants' claimed invention. Absent such a showing, the Examiner has improperly used Appellants' disclosure as an instruction book on how to reconstruct to the prior art to arrive at Appellants' claimed invention.

Furthermore, any deficiencies of the cited references cannot be remedied by general conclusions about what is "basic knowledge" or "common sense". In re Sang Su Lee, No. 00-1158 (Fed. Cir. 2002).

In the present situation, the Examiner has **not** met the initial burden of producing factual evidence to establish a *prima facie* case of obviousness. Specifically, the Examiner has ignored to treat the claim invention as a whole, failed to consider key limitations of Appellants' base claims 1, 13 and 21, and failed to provide any suggestion or motivation from either Sweet '278 or Warnock '064 in the manner to arrive at Appellants' claimed "electronic book system for advancing distribution of electronic reading material using an electronic book (e-book) server at different locations over different data networks (i.e., private network and public network) in order to improve data access efficiency at the e-book server using an e-book or similar viewing device" as generally defined in each of Appellants' base claims 1, 13 and 21.

Turning now to Appellants' claim invention, each of Appellants' independent claims 1, 13 and 21 defines a specific arrangement and new functionality of an electronic book system for advancing distribution of electronic reading material using

an electronic book (e-book) server at different locations over different data networks (i.e., private network and public network) in order to improve data access efficiency at the e-book server using an e-book in the manner shown in FIG. 1, FIG. 7, and FIG. 8.

For example, Appellants' base claim 1 defines an electronic book (e-book) system, comprising:

a private network;
a central server connected to said private network, which stores a collection of electronic documents;
an e-book server which stores an electronic document selected from said central server converted in an e-book format for later downloading to a remote e-book terminal, via a public network; and
a host computer connected to said private network, which selects the electronic document from said central server, and uses a print function of an operating system to transfer the selected electronic document from said central server for storage in an e-book format at said e-book server for later downloading to said remote e-book terminal, via said public network.

Alternatively, Appellants' base claim 13 defines an electronic book (e-book) system comprising:

a private network;
a central server connected to said private network, which stores a collection of electronic documents;
a docking station connected to said private network, which supports an e-book terminal to receive an electronic document selected from said central server converted in an e-book format for later viewing off-line; and
a computer connected to said private network, which selects the electronic document from said central server, and uses a print

function of an operating system to transfer the selected electronic document from said central server in an e-book format to said docking station for downloading into said e-book terminal for later viewing off-line.

As defined in Appellants' base claims 1 and 13, electronic documents (materials) can be advantageously distributed using an e-book server (or docking station supporting an e-book terminal) at different locations over different data networks, such as a private network and a public network, in order to improve data access efficiency at the e-book server using an e-book terminal or similar viewing device.

In contrast to the e-book system of Appellants' base claims 1 and 13, Sweet '278, as previously discussed, only discloses a technique (i.e., a client software) utilized at a user host computer 100, shown in FIG. 11, for capturing hypertext (known as "HTML") web pages available on-line, via a web page server 140, for example, for convenient viewing, via a display 104. Since most visual display data on the web are stored as sets of linked HTML documents, Sweet '278 proposes that such visual display data be converted and stored as a single document, having a fixed page size, using a physical markup language such as the portable document format (PDF) as described by Adobe System. This is done by calculating minimum dimensions required to display all screen objects within the document at their normal size, creating a physical markup representation and scaling the same based on the

calculations. As a result, web pages can be converted to a format having fixed page dimensions.

The client software, as shown in FIG. 11, is in the form of a plug-in module or an OS extension, installed at a user host computer 100, in order to enable the user to retrieve HTML web pages from a web server 140, convert and integrate the retrieved HTML web page(s) into a single paginated document described in a physical markup language, such as PDF, using a web page integrator 135, for a visual display on a monitor 140, via a PDF viewer 120.

In other words, Sweet '278 discloses only the arrangement of two relevant components, i.e., a user host computer 100 and a web server 140 (including a database 142 supporting one or more web pages 144) connected to the user host computer 100, via a communication link 102.

Sweet '278 does **not** disclose or suggest anything that is remotely resemble to Appellants' claimed "electronic book system for advancing distribution of electronic reading material using an electronic book (e-book) server at different locations over different data networks (i.e., private network and public network) in order to improve data access efficiency at the e-book server using an e-book or similar viewing device" as generally defined in each of Appellants' base claims 1 and 13.

Certainly, Sweet '278 does **not** disclose the specific arrangement and

functionality of Appellants' private network, central server, e-book server (or docking station), host computer and remote e-book terminal as defined in each of Appellants' base claims 1 and 13.

Nevertheless, on page 3 of the final Office Action (Paper No. 7) dated on October 21, 2003, the Examiner cites element 144, FIG. 11 of Sweet '278 to correspond to Appellants' claimed "central server".

However, this citation is misplaced. Element 144, as shown in FIG. 11 of Sweet '278, does **not** correspond to Appellants' claimed "central server". Rather, such an element 144, FIG. 11 of Sweet '278 corresponds to one or more web pages stored in a database included in the web server 140 so that the user host computer 100 can access thereto.

Next, the Examiner cites element 100, FIG. 11 of Sweet '278 to correspond to Appellants' claimed "e-book server".

Again, this citation is misplaced. Element 100, as shown in FIG. 11 of Sweet '278 does **not** correspond to Appellants' claimed "e-book server". Rather, such an element 100, FIG. 11 of Sweet '278 corresponds to a user host computer 100 used to store the Adobe software, such as a Browser 110 used to access the web, a web page integrator 135 used to convert retrieved HTML web page(s) into a single PDF document, and a PDF viewer 120 used to allow the user to view the single PDF document on a display monitor 104.

In contrast to the user host computer 100, shown in FIG. 11 of Sweet '278, a server as is well known in the computer art and is expressly defined, for example, in the McGraw-Hill Illustrated Dictionary of Personal Computers, 4th Edition, as:

“a computer or processor on a network that provides a very specific service to the network, such as, a central file [which provide a central repository of files and programs] on the network so that another computer system can access thereto.”

In view of such well-known definition and the specific definition provided in Appellants' original disclosure and claims, an e-book server is a computer system that serves as a central file of electronic documents in an e-book format for later downloading to another computer system or terminal on the network.

User host computer 100, as shown in FIG. 11 and described on column 8, lines 32-35 of Sweet '278, is only intended to enable a user to retrieve Web pages stored at a Web server 140 in HTML languages and convert the same into a single PDF document, using a Web page integrator 135, for a visual display on a monitor 140, using a PDF viewer 120. Such a host computer 100 as described by Sweet '278 does **not** store any repository of electronic documents in an e-book format for later downloading to a remote e-book terminal or any other computer system on the network. As a result, such a host computer 100 is **not** and cannot be interpreted to read on Appellants' claimed “e-book server”.

The Examiner further cites element 140, FIG. 11 of Sweet '278 to correspond

to Appellants' claimed "host computer".

Again, this citation is misplaced. Element 140, as shown in FIG. 11 of Sweet '278 does **not** correspond to Appellants' claimed "host computer". Rather, such an element 140, FIG. 11 of Sweet '278 corresponds to a **web server** used to store web pages 144 at a **web page database** 142.

Likewise, the Examiner further cites column 8, lines 24-44 of Sweet '278 to correspond to Appellants' claimed "remote e-book terminal".

Again, this citation is misplaced. The cited column 8, lines 24-44 of Sweet '278 simply refers to the use of a **web page integrator** 135 used to convert retrieved HTML web page(s) into a single **PDF document**, and a **PDF viewer** 120 used to allow the user to view the single **PDF document** on a **display monitor** 104.

Sweet '278 simply does **not** disclose or suggest any "remote e-book terminal" or any conversion of a selected electronic document into an e-book format for later downloading to a **remote e-book terminal** as alleged by the Examiner.

In summary, Sweet '278 only discloses the arrangement and functionality of two relevant components, i.e., a user host computer 100 and a web server 140 (including a **database** 142 supporting one or more **web pages** 144) connected to the user host computer 100, via a **communication link** 102. Sweet '278 does **not** disclose the specific arrangement and functionality of Appellants' private network, central server, e-book server (or docking station), host computer and remote e-book

terminal as defined in each of Appellants' base claims 1 and 13.

As a secondary reference, Warnock '064 does **not** remedy the noted deficiencies of Sweet '278 in order to arrive at Appellants' base claims 1 and 13. This is because Warnock '064 is only cited for allegedly disclosing, on column 5, lines 51-56, the feature, "print function of an operating system to transfer the selected electronic file for storage as an e-book format from the central server to the e-book server". Even then, column 5, lines 51-56 of Warnock '064 does **not** disclose what the Examiner alleges. Specifically, on column 5, lines 51-56, Warnock '064 only describes that,

"it should be noted that the PDF document 76 has the formatting and appearance of the originally created document 74 [of FIG. 3A] after the document 74 has been printed. In fact, in the present invention, the PDF article 76 is created by a printer driver accessed by the software which created the original document."

As can be seen from the cited column 5, lines 51-56 of Warnock '064, there is **no** disclosure of any "print function of an operating system to transfer the selected electronic file for storage as an e-book format from the central server to the e-book server" as alleged by the Examiner.

As previously discussed, Warnock '064, as a secondary reference, only discloses an electronic document program (software) installed at a user host computer, as shown in FIG. 1, including a document generator to enable a user to create a source document including one or more articles, and information

concerning section links between consecutive sections within a particular article, and a document reader to enable the user to navigate through the articles, including automatically panning and zooming into a reading area of a display window to enhance the readability of those portions of the article.

According to Warnock '064, the source document created is converted into a PDF document, as shown in step 58, FIG. 3, edited (if necessary, see steps 60, 62, 64) and then stored in local memory 14, or alternatively, in remote memory over a network 28, as shown in step 66, FIG. 1. Such PDF document as stored can subsequently be printed, as shown in FIG. 3B, or alternatively, be displayed in a variety of article viewing modes, including a normal view mode and an article view mode. In an article view mode, portions of the article or the entire article can be read regardless of the physical arrangement of any article section within the PDF document. Selected portions of the PDF document may be panned and zoomed to fit a viewing area or window to enhance the readability of the article.

The cited column 5, lines 51-62 of Warnock '064 only refers to the situation where the PDF document, which has been stored in local memory 14, or alternatively, in remote memory over a network 28, as shown in step 66, FIG. 1, can be printed, if the user host computer, as shown in FIG. 1, has the proper PDF printer driver, such as Aldus Personal Press 2.0 software. Such cited column 5, lines 51-62 of Warnock '064 does not refer to the use of a "print function of an operating system

to transfer the selected electronic file for storage as an e-book format from the central server to the e-book server" as alleged by the Examiner.

Separately, independent claim 21 defines an electronic book (e-book) system, comprising:

a first network;
a second network different from said first network;
a remote e-book terminal;
a host computer;
a central server connected to said first network, which stores a collection of electronic documents; and
an e-book server which stores an electronic document selected from said central server converted in an e-book format for later downloading to said remote e-book terminal, via said second network, wherein said host computer connected to first network, and having an e-book driver software installed therein to provide an interface with an operating system (OS) and to direct a selected electronic document from said central server to said e-book server, and an emulation software installed therein to emulate said e-book server as a token network printer in said first network, when a print function of the operating system (OS) is activated to transfer the selected electronic document from said central server for storage in an e-book format at said e-book server for later downloading to said remote e-book terminal, via said second network.

As expressly defined in Appellants' base claim 21, the e-book system, as shown in FIG. 7, comprises several discrete elements arranged in a very specific configuration to obtain new functionalities that are **not** described or suggested anywhere in the Examiner's proposed combination of Sweet '287 and Warnock '064.

Specifically, the e-book system comprises a first network; a second network different from the first network, a remote e-book terminal; a host terminal; a central

server connected to the first network, which stores a collection of electronic documents; and an e-book server. The host terminal is then connected to the first network, and is provided with an e-book driver software installed therein to provide an interface with an operating system (OS) and to direct a selected electronic document from the central server to the e-book server, and an emulation software installed therein to emulate the e-book server as a token network printer in the first network, when a print function of the operating system (OS) is activated to transfer the selected electronic document from the central server for storage in an e-book format at the e-book server for later downloading to the remote e-book terminal, via the second network.

In contrast to the e-book system of Appellants' base claim 21, Sweet '278, as previously discussed, only discloses the arrangement and functionality of two relevant components, i.e., a user host computer 100 and a web server 140 (including a database 142 supporting one or more web pages 144) connected to the user host computer 100, via a communication link 102.

Sweet '278 does **not** disclose or suggest anything that is remotely resemble to Appellants' claimed "electronic book system for advancing distribution of electronic reading material using an electronic book (e-book) server at different locations over different data networks (i.e., private network and public network) in order to improve data access efficiency at the e-book server using an e-book or

similar viewing device" as defined in Appellants' base claim 21.

Certainly, Sweet '278 does **not** disclose the specific arrangement of Appellants' claimed e-book system comprising a first network; a second network different from the first network, a remote e-book terminal; a host terminal; a central server connected to the first network, which stores a collection of electronic documents; and an e-book server in which the host terminal is connected to the first network, and is provided with an e-book driver software installed therein to provide an interface with an operating system (OS) and to direct a selected electronic document from the central server to the e-book server, and an emulation software installed therein to emulate the e-book server as a token network printer in the first network, when a print function of the operating system (OS) is activated to transfer the selected electronic document from the central server for storage in an e-book format at the e-book server for later downloading to the remote e-book terminal, via the second network, as expressly defined in Appellants' base claim 21.

Nevertheless, on pages 5-6 of the final Office Action (Paper No. 7) dated on October 21, 2003, the Examiner has not only ignored key features pertaining to the e-book driver software and the emulation software as installed in the user host computer, but also mischaracterized all components of Appellants' base claim 21 relative to Sweet '278.

For example, the Examiner cites element 100, FIG. 11 of Sweet '278 to

correspond to Appellants' claimed "e-book terminal". Interesting enough, the same element 100 was cited to correspond to Appellants' claimed "e-book server" in the context of Appellants' base claim 21.

Nevertheless, the citation is misplaced. Element 100, as shown in FIG. 11 of Sweet '278 does **not** correspond to Appellants' claimed "e-book terminal". E-book terminal as described on page 9, lines 9-13; pages 17-25 of Appellants' original specification, and shown in FIGs. 5A-5B and FIG. 6, is a mobile device used by a user to download or request for automatic delivery of a selected electronic document stored in an e-book format.

In contrast to Appellants' claimed "e-book terminal", such an element 100, FIG. 11 of Sweet '278 corresponds to a host computer used to store the Adobe software, such as a Browser 110 used to access the web, a web page integrator 135 used to convert retrieved HTML web page(s) into a single PDF document, and a PDF viewer 120 used to allow the user to view the single PDF document on a display monitor 104.

The Examiner further cites element 140, FIG. 11 of Sweet '278 to correspond to Appellants' claimed "host computer".

Again, this citation is misplaced. Element 140, as shown in FIG. 11 of Sweet '278 does **not** correspond to Appellants' claimed "host computer". Rather, such an element 140, FIG. 11 of Sweet '278 corresponds to a web server used to store web

pages at a web page database 142.

Likewise, the Examiner cites element 144, FIG. 11 of Sweet '278 to correspond to Appellants' claimed "central server" connected to the private network.

However, this citation is misplaced. Element 144, as shown in FIG. 11 of Sweet '278, does not correspond to Appellants' claimed "central server". Rather, such an element 144, FIG. 11 of Sweet '278 corresponds to one or more web pages stored in a database included in the web server 140 so that the user host computer 100 can access thereto.

Lastly, the Examiner again cites element 100, FIG. 11 of Sweet '278 to correspond to Appellants' claimed "e-book server". Interesting enough, the same element of Sweet '278 which has been cited to correspond to Appellants' claimed "e-book terminal" as previously discussed, is now again cited to correspond to Appellants' claimed "e-book server"

Again, the citation is misplaced. Such an element 100, FIG. 11 of Sweet '278 only corresponds to a host computer used to store the Adobe software, such as a Browser 110 used to access the web, a web page integrator 135 used to convert retrieved HTML web page(s) into a single PDF document, and a PDF viewer 120 used to allow the user to view the single PDF document on a display monitor 104.

In summary, Sweet '278 only discloses the arrangement and functionality of

two relevant components, i.e., a user host computer 100 and a web server 140 (including a database 142 supporting one or more web pages 144) connected to the user host computer 100, via a communication link 102. Sweet '278 does **not** disclose the specific arrangement and functionality of Appellants' first network, second network, remote e-book terminal, host computer, central server, and e-book server as defined in each of Appellants' base claim 21.

As a secondary reference, Warnock '064 does **not** remedy the noted deficiencies of Sweet '278 in order to arrive at Appellants' base claim 21. This is because Warnock '064 is only cited for allegedly disclosing, on column 5, lines 51-56, the feature, "print function of an operating system to transfer the selected electronic file for storage as an e-book format from the central server to the e-book server". Moreover, the cited column 5, lines 51-56 of Warnock '064 does **not** disclose what the Examiner alleges for reasons discussed.

In view of the foregoing explanations, the fact that Sweet '278 and Warnock '064 fail to disclose and suggest key features of Appellants' base claims 1, 13 and 21, including the specific arrangement of a first network, a second network different from the first network, a remote e-book terminal, a host terminal, a central server connected to the first network to store a collection of electronic documents, and an e-book server to store those electronic documents in an e-book format, the

Examiner has failed to establish a *prima facie* case of obviousness of Appellants' independent claims 1, 13 and 21.

B. **The Examiner also erred in making the modification of Sweet '278 to incorporate the alleged print feature from Warnock '064 to arrive at Appellants' independent claims 1, 13 and 21 because there is no suggestion in either Sweet '278 or Warnock '064 to support such a modification.**

The mere fact that a prior art device could be modified to produce the claimed invention does not justify an obviousness rejection unless the prior art suggested the desirability of the modification (emphasis in original).

In re Laskowski, 871 F.2d 115, 10 USPQ2d 1397 (Fed. Cir. 1999); quoting In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). In re Fine, 873 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In re Freed, 425 F.2d 785, 165 USPQ 570 (CCPA 1970). Therefore, even assuming *arguendo* that Sweet '278 discloses the specific arrangement and functionality of Appellants' claimed "e-book system", which Appellants do not believe, there is still **no** reason or motivation for one skilled in the art to make the modification in the manner suggested by the Examiner in order to arrive at Appellants' independent claims 1, 13 and 21. This is

particular true, when neither Sweet '278 nor Warnock '064 discloses the use of a "print function of an operating system to transfer the selected electronic file for storage as an e-book format from the central server to the e-book server".

Therefore, in view of the complete failure of Sweet '278 and Warnock '064 to suggest the modification, Appellants respectfully submit that the proposed modification of Sweet '278 and Warnock '064 does not make obvious Appellants' claimed invention. Accordingly, the rejection of Appellants' independent claims 1, 13 and 21 should be reversed.

C. The Examiner further erred in making the modification of Sweet '278 to incorporate the alleged print feature from Warnock '064 to arrive at Appellants' independent claims 1, 13 and 21 because the Examiner's proposed modification of Sweet '278 and Warnock '064 renders Sweet '278 unsatisfactory for its intended purposes.

If the proposed modification of the prior art renders the prior art invention being modified unsatisfactory for its intended purpose, then there is **no** suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Even assuming *arguendo*, that the user host computer 100 of Sweet '278 is to be modified to "transfer the selected electronic document from [the] central server for storage in an e-book format at [the] e-book server for later downloading to [the]

“remote e-book terminal” in the manner defined by Appellants’ independent claims 1, 13 and 21, such a modification will undoubtedly destroy its intended purpose, that is, to provide “a client software, in the form of a plug-in module or an OS extension, installed at a user host computer 100, in order to enable the user to retrieve HTML web pages from a web server 140, convert the retrieved HTML web page(s) into a single PDF document, using a web page integrator 135, for a visual display on a monitor 140, via a PDF viewer 120.

D. **The Examiner further erred in making the modification of Sweet ‘278 to incorporate the alleged print feature from Warnock ‘064 to arrive at Appellants’ independent claims 1, 13 and 21 because the Examiner’s proposed modification of Sweet ‘278 changes the principle of operation of Sweet ‘278.**

Likewise, if the proposed modification of the prior art changes the principle of operation of the prior art invention being modified, then the teachings of the prior art reference are not sufficient to render the claims *prima facie* obvious. In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

Even assuming *arguendo*, that the user host computer 100 of Sweet ‘278 is to be modified to “transfer the selected electronic document from [the] central server for storage in an e-book format at [the] e-book server for later downloading to [the] remote e-book terminal” in the manner defined by Appellants’ independent claims 1,

13 and 21, such a modification will undoubtedly change the principle of operation of Sweet '278, that is, to provide to provide "a client software, in the form of a plug-in module or an OS extension, installed at a user host computer 100, in order to enable the user to retrieve HTML web pages from a web server 140, convert the retrieved HTML web page(s) into a single PDF document, using a web page integrator 135, for a visual display on a monitor 140.

E. Dependent claims 2-7, 9-12, 14-18, 20, 22-26 and 28 are deemed separately novel over Sweet '278 and Warnock '064.

Claims 2-7, 9-12, 14-18, 20, 22-26 and 28 which depend from base claims 1, 13 and 21, are deemed patentable from base claims 1, 13 and 21 if their base claims 1, 13 and 21 are patentable. Harness Int'l, Inc., v. Simplicatic Eng'g Co., 891 F.2d 1100, 1108, 2 USPQ2d 1826, 1831 (Fed. Cir. 1987); In re Abele, 684 F.2d 909, 214 USPQ 682, 689 (CCPA 1982) *see also* In re Sernaker, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983). Even assuming *arguendo* that independent claims 1, 13 and 21 are not patentable under 35 U.S.C. §103, which Appellants do not believe, claims 2-7, 9-12, 14-18, 20, 22-26 and 28 are separately patentable from parent claims 1, 13 and 21 for reasons presented herein below.

For example, dependent claims 2 and 14 further define that host computer comprises "an e-book driver software to provide an interface with said operating

system and to direct the selected electronic document to said e-book server, and an emulation software to emulate said e-book server as a token network printer in said private network.” Again, this feature is neither disclosed nor suggested by Sweet ‘278 and Warnock ‘064, and the Examiner has **not** presented any evidence to the contrary.

Claims 3, 15 and 23 further define that the e-book driver software is installed at the “host computer using an Add Printer Wizard provided by the operating system for setting up said e-book server as a token network printer in said private network to print from the operating system of said host computer.” Again, this feature is neither disclosed nor suggested by Sweet ‘278 and Warnock ‘064, and the Examiner has **not** presented any evidence to the contrary.

Claims 4, 16 and 24 further define that the “emulation software is installed at one of said host computer and said e-book server to emulate said e-book server as a token network printer in said private network, and includes a conversion subroutine for converting data reflecting the selected electronic document into an e-book format for storage at said e-book server.” Again, this feature is neither disclosed nor suggested by Sweet ‘278 and Warnock ‘064, and the Examiner has **not** presented any evidence to the contrary.

Claims 5, 17 and 25 further define that the “e-book driver software” and the “emulation software are embodied on any of a variety of computer readable media

for use with said host computer." Again, this feature is neither disclosed nor suggested by Sweet '278 and Warnock '064, and the Examiner has **not** presented any evidence to the contrary.

Claim 6, 18 and 24 further define that the "emulation software installed at said host computer emulates said e-book server as a token network printer and then converts the selected electronic document into an e-book format, via said conversion subroutine, before a physical redirection to said e-book server over said private network." Again, this feature is neither disclosed nor suggested by Sweet '278 and Warnock '064, and the Examiner has **not** presented any evidence to the contrary.

Claims 7 and 26 further define that the "emulation software installed at said host computer emulates said e-book server as a token network printer and then converts the selected electronic document into an e-book format transferred from said host computer to said e-book server, via said conversion subroutine." Again, this feature is neither disclosed nor suggested by Sweet '278 and Warnock '064, and the Examiner has **not** presented any evidence to the contrary.

Claims 10 and 28 further define that the "e-book terminal for use to download or request automatic delivery of a selected electronic document stored in said e-book format at said e-book server comprises:

an electronic module which provides a central processing unit (CPU) to control all operations of said e-book terminal under instructions of the operating system, a BIOS read-only-memory (ROM),

and a random-access-memory (RAM) which provides the primary memory space to write, store and retrieve information and program instructions used by the CPU;

 a display and a display controller which support a visual display of the selected electronic document on a display screen;

 a power unit which provides power supply to said e-book terminal;

 an updatable read-only-memory (ROM) which supports additional memory capacity;

 a communication interface which supports communications with said e-book server via said public network; and

 a security unit which provides overall security to said e-book terminal.

Again, these features are neither disclosed nor suggested by Sweet '278 and Warnock '064, and the Examiner has **not** presented any evidence to the contrary.

In view of the fact that the Examiner has **not** provided any evidence nor has the Examiner even alleged that the proposed combination of Sweet '278 and Warnock '064, discloses key features of Appellants' dependent claims 2-7, 9-12, 14-18, 20, 22-26 and 28 which depend from base claims 1, 13 and 21, as outlined herein. As a result, Appellants believe that 2-7, 9-12, 14-18, 20, 22-26 and 28 are deemed patentable from base claims 1, 13 and 21.

X. Conclusion

In view of the law and the facts presented herein, Appellants respectfully submit that the Sweet/Warnock combination fails to disclose or suggest Appellants'

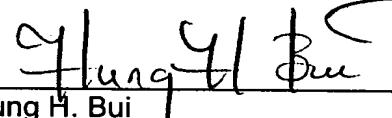
claimed invention. The §103 art rejections are essentially based on the erroneous belief that Sweet '278 and Warnock '064 disclose all the claimed features. However, the Appellants have established this as incorrect. Each of independent claims 1, 13 and 21 clearly defines an electronic book system having a specific arrangement and functionality of claimed "private network," "central server," "e-book server" (or docking station), "host computer" and "remote e-book terminal" as defined in each of Appellants' base claims 1 and 13, or alternatively, the claimed "first network," "second network" different from the first network, "remote e-book terminal," "host terminal," "central server" connected to the first network to store a collection of electronic documents, and "e-book server" as defined in Appellants' base claim 21.

These features advantageously allow Appellants' claimed "electronic book system for advancing distribution of electronic reading material using an electronic book (e-book) server at different locations over different data networks (i.e., private network and public network) in order to improve data access efficiency at the e-book server using an e-book or similar viewing device". Such is clearly not possible in the Sweet/Warnock combination. Therefore, Appellants respectfully request the Board reverse the outstanding final rejection of claims 1-7, 9-18, 20-26 and 28.

A fee of \$320.00 is incurred by the Appeal Brief. Please charge any shortage of fees due in connection with the filing of this paper, including extension of time fees, to the Deposit Account of Antonelli, Terry, Stout & Kraus, No. 01-2135 (Application No. 0171.37310X00), and please credit any excess fees to said deposit account.

Respectfully submitted,

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Appendix:

Claims 1-28 On Appeal

Claim 1 (Original): An electronic book (e-book) system, comprising:
a private network;
a central server connected to said private network, which stores a collection of electronic documents;
an e-book server which stores an electronic document selected from said central server converted in an e-book format for later downloading to a remote e-book terminal, via a public network; and
a host computer connected to said private network, which selects the electronic document from said central server, and uses a print function of an operating system to transfer the selected electronic document from said central server for storage in an e-book format at said e-book server for later downloading to said remote e-book terminal, via said public network.

Claim 2 (Original): The system as claimed in claim 1, wherein said host computer comprises an e-book driver software to provide an interface with said operating system and to direct the selected electronic document to said e-book

server, and an emulation software to emulate said e-book server as a token network printer in said private network.

Claim 3 (Original): The system as claimed in claim 2, wherein said e-book driver software is installed at said host computer using an Add Printer Wizard provided by the operating system for setting up said e-book server as a token network printer in said private network to print from the operating system of said host computer.

Claim 4 (Original): The system as claimed in claim 2, wherein said emulation software is installed at one of said host computer and said e-book server to emulate said e-book server as a token network printer in said private network, and includes a conversion subroutine for converting data reflecting the selected electronic document into an e-book format for storage at said e-book server.

Claim 5 (Original): The system as claimed in claim 2, wherein said e-book driver software and said emulation software are embodied on any of a variety of computer readable media for use with said host computer.

Claim 6 (Original): The system as claimed in claim 2, wherein said

emulation software installed at said host computer emulates said e-book server as a token network printer and then converts the selected electronic document into an e-book format, via said conversion subroutine, before a physical redirection to said e-book server over said private network.

Claim 7 (Original): The system as claimed in claim 2, wherein said emulation software installed at said host computer emulates said e-book server as a token network printer and then converts the selected electronic document into an e-book format transferred from said host computer to said e-book server, via said conversion subroutine.

Claim 8 (Original): The system as claimed in claim 2, wherein said e-book driver software and said emulation software installed at said host computer interacts with the operating system to transfer the selected electronic document to said e-book server, via said private network, according to the following steps:

activating said driver software, when a user selects said print function from the operating system;

reading, at said driver software, data reflecting the selected electronic document from a random-access-memory;

directing, at said driver software, data reflecting the selected electronic

document to the operating system for a physical redirection to said e-book server, via said private network;

activating said emulation software, when said driver software returns to a stand-by (idle) mode;

receiving, at said emulation software, data reflecting the selected electronic document from said driver software, via the operating system;

converting, at said emulation software, data reflecting the selected electronic document into an e-book format and reformatting the data for said remote e-book terminal; and

transmitting, at said emulation software, reformatted data reflecting the selected electronic document to the operating system for said physical redirection to said e-book server, via said private network.

Claim 9 (Original): The system as claimed in claim 2, wherein said private network corresponds to a local area network (LAN), and wherein said public network corresponds to one of a plain old telephone service (POTS), a public switched telephone network (PSTN), an integrated services digital network (ISDN), a mobile network, a satellite network, an Internet, a terrestrial digital TV network, a cellular network, and a short-range radio (Bluetooth, Home RF protocol, wireless LAN) network.

Claim 10 (Original): The system as claimed in claim 2, wherein said e-book terminal for use to download or request automatic delivery of a selected electronic document stored in said e-book format at said e-book server comprises:

- an electronic module which provides a central processing unit (CPU) to control all operations of said e-book terminal under instructions of the operating system, a BIOS read-only-memory (ROM), and a random-access-memory (RAM) which provides the primary memory space to write, store and retrieve information and program instructions used by the CPU;
- a display and a display controller which support a visual display of the selected electronic document on a display screen;
- a power unit which provides power supply to said e-book terminal;
- an updatable read-only-memory (ROM) which supports additional memory capacity;
- a communication interface which supports communications with said e-book server via said public network; and
- a security unit which provides overall security to said e-book terminal.

Claim 11 (Original): The system as claimed in claim 1, wherein said selected electronic document is printed from said host computer under

instructions from a user for delivery to said e-book server over said private network for later downloading, via said public network, to said remote e-book terminal.

Claim 12 (Original): The system as claimed in claim 1, wherein said selected electronic document is printed from said host computer under instructions from a user for delivery to said e-book server over said private network and an Internet for later downloading, via said Internet, to said remote e-book terminal.

Claim 13 (Original): An electronic book (e-book) system, comprising:
a private network;
a central server connected to said private network, which stores a collection of electronic documents;
a docking station connected to said private network, which supports an e-book terminal to receive an electronic document selected from said central server converted in an e-book format for later viewing off-line; and
a computer connected to said private network, which selects the electronic document from said central server, and uses a print function of an operating system to transfer the selected electronic document from said central server in an e-book

format to said docking station for downloading into said e-book terminal for later viewing off-line.

Claim 14 (Original): The system as claimed in claim 13, wherein said computer comprises an e-book driver software to provide an interface with said operating system and to direct the selected electronic document to said docking station for downloading into said e-book terminal, and an emulation software to emulate said e-book terminal as a token network printer in said private network.

Claim 15 (Original): The system as claimed in claim 14, wherein said e-book driver software is installed at said computer using an Add Printer Wizard provided by the operating system for setting up said e-book terminal as a token network printer in said private network to print from the operating system of said computer.

Claim 16 (Original): The system as claimed in claim 14, wherein said emulation software is installed at said computer to emulate said e-book terminal as a token network printer in said private network, and includes a conversion subroutine for converting data reflecting the selected electronic document into an e-book format for downloading into said e-book terminal.

Claim 17 (Original): The system as claimed in claim 14, wherein said e-book driver software and said emulation software are embodied on any of a variety of computer readable media for use with said computer.

Claim 18 (Original): The system as claimed in claim 14, wherein said emulation software installed at said computer emulates said e-book terminal as a token network printer and then converts the selected electronic document into an e-book format, via said conversion subroutine, before a physical redirection to said docking station for downloading into said e-book terminal over said private network.

Claim 19 (Original): The system as claimed in claim 14, wherein said e-book driver software and said emulation software installed at said computer interacts with the operating system to transfer the selected electronic document to said docking station for downloading into said e-book terminal, via said private network, according to the following steps:

activating said driver software, when a user selects said print function from the operating system;

reading, at said driver software, data reflecting the selected electronic document from a random-access-memory;

directing, at said driver software, data reflecting the selected electronic document to the operating system for a physical redirection to said e-book server, via said private network;

activating said emulation software, when said driver software returns to a stand-by (idle) mode;

receiving, at said emulation software, data reflecting the selected electronic document from said driver software, via the operating system;

converting, at said emulation software, data reflecting the selected electronic document into an e-book format and reformatting the data for said e-book terminal; and

transmitting, at said emulation software, reformatted data reflecting the selected electronic document to the operating system for said physical redirection to said docking station for downloading into said e-book terminal, via said private network.

Claim 20 (Original): The system as claimed in claim 14, wherein said private network corresponds to a local area network (LAN).

Claim 21 (Previously Presented): An electronic book (e-book) system, comprising:

a first network;

a second network different from said first network;

a remote e-book terminal;

a host computer;

a central server connected to said first network, which stores a collection of electronic documents; and

an e-book server which stores an electronic document selected from said central server converted in an e-book format for later downloading to said remote e-book terminal, via said second network,

wherein said host computer connected to first network, and having an e-book driver software installed therein to provide an interface with an operating system (OS) and to direct a selected electronic document from said central server to said e-book server, and an emulation software installed therein to emulate said e-book server as a token network printer in said first network, when a print function of the operating system (OS) is activated to transfer the selected electronic document from said central server for storage in an e-book format at said e-book server for later downloading to said remote e-book terminal, via said second network.

Claim 22 (Previously Presented): The system as claimed in claim 21, wherein said first network is a private network connecting said host computer, said

central server, and said e-book server, and wherein said second network is a public network connecting said e-book server and said remote e-book terminal.

Claim 23 (Previously Presented): The system as claimed in claim 22, wherein said e-book driver software is installed at said host computer using an Add Printer Wizard provided by the operating system (OS) for setting up said e-book server as a token network printer in said private network to print from the operating system (OS) of said host computer.

Claim 24 (Previously Presented): The system as claimed in claim 22, wherein said emulation software is also installed in said e-book server to emulate said e-book server as a token network printer in said private network, and includes a conversion subroutine for converting data reflecting the selected electronic document into an e-book format for storage at said e-book server.

Claim 25 (Previously Presented): The system as claimed in claim 22, wherein said e-book driver software and said emulation software are embodied on any of a variety of computer readable media for use with said host computer.

Claim 26 (Previously Presented): The system as claimed in claim 22,

wherein said emulation software installed in said host computer emulates said e-book server as a token network printer and then converts the selected electronic document into an e-book format, via said conversion subroutine, before a physical redirection to said e-book server over said private network.

Claim 27 (Previously Presented): The system as claimed in claim 22, wherein said e-book driver software and said emulation software installed in said host computer interacts with the operating system (OS) to transfer the selected electronic document to said e-book server, via said private network, according to the following steps:

activating said driver software, when a user selects said print function from the operating system (OS);

reading, at said driver software, data reflecting the selected electronic document from a random-access-memory (RAM);

directing, at said driver software, data reflecting the selected electronic document to the operating system (OS) for a physical redirection to said e-book server, via said private network;

activating said emulation software, when said driver software returns to a stand-by (idle) mode;

receiving, at said emulation software, data reflecting the selected electronic

document from said driver software, via the operating system (OS);
converting, at said emulation software, data reflecting the selected electronic document into an e-book format and reformatting the data for said remote e-book terminal; and
transmitting, at said emulation software, reformatted data reflecting the selected electronic document to the operating system (OS) for said physical redirection to said e-book server, via said private network.

Claim 28 (Previously Presented): The system as claimed in claim 22, wherein said e-book terminal for use to download or request automatic delivery of a selected electronic document stored in said e-book format at said e-book server comprises:

an electronic module which provides a central processing unit (CPU) to control all operations of said e-book terminal under instructions of the operating system, a BIOS read-only-memory (ROM), and a random-access-memory (RAM) which provides the primary memory space to write, store and retrieve information and program instructions used by the CPU;
a display and a display controller which support a visual display of the selected electronic document on a display screen;
a power unit which provides power supply to said e-book terminal;

an updatable read-only-memory (ROM) which supports additional memory capacity;

a communication interface which supports communications with said e-book server via said public network; and

a security unit which provides overall security to said e-book terminal.